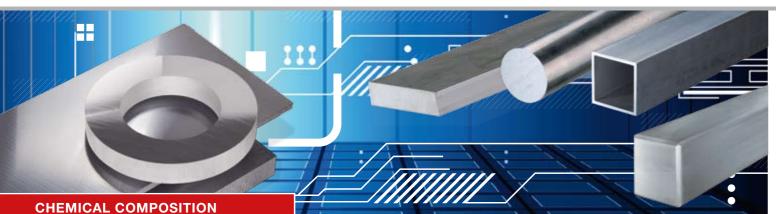
## **EN AW-7075**



#### Aluminium and aluminium alloys

#### Alloy designation:

EN AW	Al Zn5,5 Mg Cu					
Old designation	Al Zn Mg Cu1,5					
Material no. according to DIN	3.4365					
Great Britain BS	2L95					
Italy UNI	9007/2					
Spain						
Sweden						
Norway						
France AFNOR	A-Z5GU					
Colour code	RAL 4005 Blue Lilac					

#### Typical physical properties:

Density [g/cm <sup>3</sup> ]	2,80	
Elastic modulus [GPa]	72	
Thermal conductivity [	130 – 160	
	-50°C – 20°C	21,6
Thermal expansion coefficient[K-1*10-6]	20°C – 100°C	23,4
	20°C – 200°C	24,3
	20°C – 300°C	25,2
Specific heat J/(kg * K)	862	
Electrical conductivity	19 – 23	
Shear modulus [GPa]		27,1

#### Chemical composition<sup>x</sup> (EN 573-3):

Specifications in % Remainder: Aluminium									Oth	er
Si Fe Cu Mn Mg Cr Ni Zn Ti Ga V Note Individual T										Total <sup>2</sup>
0,40	0,40 0,50 1,2-2,0 0,30 2,1-2,9 0,18-0,28 - 5,1-6,1 0,20 <sup>3</sup>								0,05	0,15
Х	X Chemical specifications as perc. of weight. If no ranges are specified, the alloy content has the maximum value.									

**Applications:** 

Aerospace

Military technology

Tool making, mould making and model making

<sup>2</sup> Includes all items listed for which no limit values are specified.

<sup>3</sup> Sum for Zr+Ti max. 0,25. This applies to forged or extruded products when the value has been agreed upon between the customer and supplier.

#### Special features of this material:

- Curable alloy with very high strength
- Very high fatigue strength
- Good machinability

#### Available forms:

Sheets · Plates · Cuttings · Circular blanks · Rings · Bars · Tubes · Wires · Parts from drawings

### WORLD OF METALS

#### Heat treatment:

Soft annealing / recrystallisation annealing						
Annealing temperature 380°C - 420°C						
Heating-up time	2 – 3 hours					
Cooling conditions	$\leq$ 30°C/h to 230°C + 3 – 5 hours hold time, below 230°C in air					

#### Other data:

Processing / machinability		
Soft annealed	-	
Work-hardened	-	
Heat-treated	2	
Dimensional stability	4 – 5	
Erosion	1	
Surface treatment		
Anodising - (protective anodisation)	3	
Special anodising quality (EQ)EQ	-	
Anodising - decorative	5	
Painting / coating	3	
Polishing	1	
Welding		Filler metal
Gas	5	
WIG	5	
MIG	5	
Resistance welding	2	
Solder		
Brazing with flux	5	
Brazing without flux	5	
Abrasion soldering	5	
Soft soldering with flux	5	

#### Legend:

1	very	good

2 good 3 moderate

4 poor

- 5 unsuited
- EQ anodising quality must be ordered separately and confirmed

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Hardening	
Solution annealing	470°C – 480°C
Quenching	water
Natural ageing treatment	Artificial ageing is usual
Artificial ageing treatment	1. stage 110°C − 125°C · 12 − 24 hours 2. stage 165°C − 180°C · 4 − 6 hours

#### **Corrosion resistance**

In a normal atmosphere/ weather conditions	4
Sea water atmosphere	4

#### Metal forming

Cold forming		Delivery condition
Bending	4	0
Pressure forming	5	
Deep drawing (condition-based)	4 – 5	0
Upsetting (condition-based)	5	
Impact extrusion	5	
Hot forming		
Drop forging	4	
Extrusion moulding	4 – 5	
Hammer forging	4	

Suitable for food industry according to DIN EN 602	no
Working temperatures	Long-term approx. 90°C Short-term approx. 110°C – 125°C

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## **Sheets / Plates**

## WORLD OF METALS



Aluminium and aluminium alloys

## EN AW-7075 AI Zn5,5 Mg Cu

#### EN 485-2 Mechanical properties:

Delivery condition <sup>5</sup>	Nominal thickness mm		Tensile strength R <sub>m</sub> MPa		Elastic limit R <sub>p0.2</sub> MPa		Elongation % min.		Bending radius <sup>9</sup>		Hardness <sup>9</sup> HBW
	over	to	min.	max.	min.	max.	A50 mm	А	180°	90°	
	≥ 0,4	0,8	525	-	460	-	6	-	-	4,5 t <sup>8</sup>	157
	0,8	1,5	540	-	460	-	6	-	-	5,5 t <sup>8</sup>	160
	1,5	3,0	540	-	470	-	7	-	-	6,5 t <sup>8</sup>	161
	3,0	6,0	545	-	475	-	8	-	-	8,0 t <sup>8</sup>	163
	6,0	12,5	540	-	460	-	8	-	-	12,0 t <sup>8</sup>	160
	12,5	25,0	540	-	470	-	-	6	-	-	161
T6 T62	25,0	50,0	530	-	460	-	-	5	-	-	158
T651	50,0	60,0	525	-	440	-	-	4	-	-	155
1001	60,0	80,0	495	-	420	-	-	4	-	-	147
	80,0	90,0	490	-	390	-	-	4	-	-	144
	90,0	100,0	460	-	360	-	-	3	-	-	135
	100,0	120,0	410	-	300	-	-	2	-	-	119
	120,0	150,0	360	-	260	-	-	2	-	-	104
	150,0	200,0	360	-	240	-	-	2	-	-	-
	200,0	300,0	360	-	220	-	-	1	-	-	-
T652	150,0	200,0	360	-	260	-	-	1	-	-	-
1052	200,0	300,0	360	-	260	-	-	1	-	-	-
5	Other pos	sible delivery	conditions f	or this alloy:	0 · T73 · T7	351 · T76 ·	T7651				
8	Considera	bly lower be	nding radii ca	n be obtaine	ed immediate	ly after solu	tion annealin	g.			
9	For information only										

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#### We supply aluminium sheets and plates of alloy EN AW-7075 · Al Zn5,5 Mg Cu in the following dimensions:

Thickness mm	Length x Width mm	Length x Width mm	Length x Width mm
1 – 4	2.000 x 1.000	2.020 x 1.020	
5 – 250	2.020 x 1.020	2.520 x 1.270	3.020 x 1.520
Super formats	4.020 x 2.520		

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## Bars - round drawn · pressed



Aluminium and aluminium alloys

## EN AW-7075 AI Zn5,5 Mg Cu

#### EN 754-2 Mechanical properties: round bars – drawn

Delivery condition <sup>₅</sup>	Dia. mm.	Tensile strength R <sub>m</sub> MPa		Elastic limit R <sub>p0.2</sub> MPa		Elongation % min.		Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
T6	≤ 80	540	-	485	-	6	7	150
T651	≤ 80	540	-	485	-	4	5	150
T73	≤ 80	455	-	385	-	8	10	135
T7351	≤ 80	455	-	385	-	6	8	135
5	Other possible delivery conditions for this alloy: O, H111							
9	For information only							

#### EN 755-2 Mechanical properties: round bars – pressed

Delivery condition <sup>5</sup>	Dia. mm.		sile strength $R_m$ Elastic limit $R_{p0.2}$ MPa MPa		Elongation % min.		Hardness <sup>9</sup> HBW	
		min.	max.	min.	max.	A50 mm	А	
	≤ 25	540	-	480	-	5	7	150
T6 T6510	$> 25$ to $\leq 100$	560	-	500	-	-	7	150
T6510	$>100$ to $\leq150$	530	-	470	-	-	6	150
10011	$>$ 150 to $\leq 200$	470	-	400	-	-	5	150
	≤ 25	485	-	420	-	5	7	135
T73 T73510	$>$ 25 to $\leq$ 75	475	-	405	-	-	7	135
T73510	$>75$ to $\leq 100$	470	-	390	-	-	6	135
170011	$>100$ to $\leq150$	440	-	360	-	-	6	135
5	Other possible delivery conditions for this alloy: O, H111							
9	For information only							

#### We supply aluminium round bars of alloy 7075 in the following dimensions:

Thic	kness	mm

drawn: 2 - 60

pressed: 8 - 500

## WORLD OF METALS



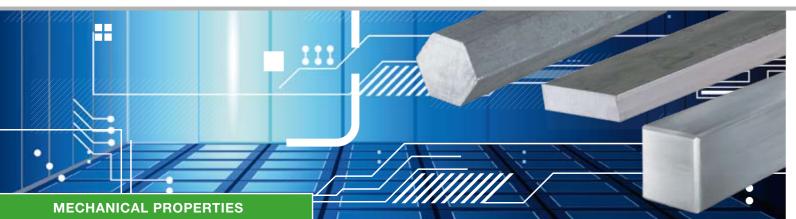
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## Bars square / flat / hexagonal drawn · pressed



Aluminium and aluminium alloys

# EN AW-7075 AI Zn5,5 Mg Cu

#### EN 754-2 Mechanical properties: Bars - drawn square · flat · hexagonal

Delivery condition <sup>5</sup>	Thickness for flat 4 + 6 pt: wrench size		nsile strength $R_m$ Elastic limit $R_{p0.2}$ MPa MPa				•	Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
T6	≤ 80	540	-	485	-	6	7	150
T651	≤ 80	540	-	485	-	4	5	150
T73	≤ 80	455	-	385	-	8	10	135
T7351	≤ 80	455	-	385	-	6	8	135
5	Other possible delivery conditions for this alloy: O, H111							
9	For information only							

#### EN 755-2 Mechanical properties: Bars - pressed square · flat · hexagonal

Delivery condition	Thickness for flat 4 + 6 pt: wrench size	Tensile strength R <sub>m</sub> MPa		Elastic limit R <sub>p0.2</sub> MPa		Elongation % min.		Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
	≤ 25	540	-	480	-	5	7	150
T6 T6510	$> 25$ to $\leq 100$	560	-	500	-	-	7	150
T6510	$> 100 \text{ to } \le 150$	530	-	470	-	-	6	150
10011	$>150$ to $\leq 200$	470	-	400	-	-	5	150
	≤ 25	485	-	420	-	5	7	135
T73	$> 25$ to $\leq 75$	475	-	405	-	-	7	135
T73510 T73511	$> 75$ to $\le 100$	470	-	390	-	-	6	135
	$> 100 \text{ to } \le 150$	440	-	360	-	-	6	135
9	For information only							

WORLD OF METALS



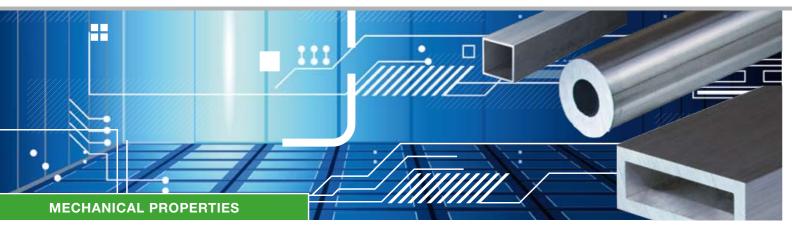
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## Tubes drawn · pressed



Aluminium and aluminium alloys

## EN AW-7075 AI Zn5,5 Mg Cu

#### EN 754-2 Mechanical properties: tubes – drawn

Delivery condition	Wall thickness mm	Tensile strength R <sub>m</sub> MPa		Elastic limit <i>R</i> <sub>p0.2</sub> MPa		Elongation % min.		Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
Т6	≤ 20	540	-	485	-	6	7	150
T6510 / T6511	≤ 20	540	-	485	-	4	5	150
T73	≤ 20	455	-	385	-	8	10	135
T73510 / T73511	≤ 20	455	-	385	-	6	8	135
9	For information only							

#### EN 755-2 Mechanical properties: tubes - pressed

Delivery condition <sup>5</sup>	Wall thickness mm	Tensile strength R <sub>m</sub> MPa		Elastic limit R <sub>p0.2</sub> MPa		Elongation % min.		Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
T6	≤ 5	540	-	485	-	6	8	150
T6510	$>$ 5 to $\leq$ 10	560	-	505	-	5	7	150
T6511	$> 10$ to $\leq 50$	560	-	495	-	4	6	150
T73	≤ 5	470	-	400	-	5	7	135
T73510	$> 5$ to $\leq 25$	485	-	420	-	6	8	135
T73511	$> 25$ to $\leq 50$	475	-	405	-	-	8	135
5	Other possible delivery conditions for this alloy: O, H111							
9	For information only							

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## Profiles drawn · pressed

WORLD OF METALS



Aluminium and aluminium alloys

## EN AW-7075 AI Zn5,5 Mg Cu

#### EN 755-2 Mechanical properties: profiles - pressed

Delivery condition	Wall thickness mm	Tensile strength R <sub>m</sub> MPa		Elastic limit <i>R</i> <sub>p0.2</sub> MPa		Elongation % min.		Hardness <sup>9</sup> HBW
		min.	max.	min.	max.	A50 mm	А	
T6 / T6510	≤ 25	530	-	460	-	4	6	150
T6511	$> 25$ to $\leq 60$	540	-	470	-	-	6	150
T73 / T73510 T73511	≤ 25	485	-	420	-	5	7	135
9	For information only							

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## **Delivery conditions**

# 

F	Production state (no limit values for mechanical properties defined).
H111	Annealed and slightly work-hardened by subsequent operations, e.g. stretching or adjustment (less than H11).
H112	Slightly work-hardened by hot forming or limited cold forming (with defined limit values of the mechanical properties).
H116	Applies to aluminium-magnesium alloys with a magnesium content $> = 4\%$ for which the limit values of the mechanical properties and the resistance to exfoliation corrosion are defined.
H12	Work-hardened - 1/4 hard.
H14	Work-hardened - 1/2 hard.
H16	Work-hardened - 3/4 hard.
H18	Work-hardened - 4/4 hard (fully through-hardened).
H19	Work-hardened - extra hard.
H22	Work-hardened and re-annealed - 1/4 hard.
H24	Work-hardened and re-annealed - 1/2 hard.
H26	Work-hardened and re-annealed - 3/4 hard.
H28	Work-hardened and re-annealed - 4/4 hard (fully through-hardened).
H32	Work-hardened and stabilised - 1/4 hard.
H34	Work-hardened and stabilised - 1/2 hard.
H36	Work-hardened and stabilised - 3/4 hard.
H38	Work-hardened and stabilised - 4/4 hard (fully through-hardened).
H42	Work-hardened and enamelled - 1/4 hard.
H44	Work-hardened and enamelled - 1/2 hard.
H46	Work-hardened and enamelled - 3/4 hard.
H48	Work-hardened and enamelled - 4/4 hard (fully through-hardened).
Hxx4	Applies to embossed or stamped metal sheets or strips, which are produced from the corresponding Hxx state.
Hxx5	Work-hardened - Applies for welded tubes.
0	Soft annealed - With the O state, products can be designated for which the required properties for the soft annealed state are achieved by the hot-forming process.
01	Thermally treated almost at the solution annealing temperature and time and cooled slowly to room temperature (formerly known as T41).
O2	Thermomechanically treated to improve formability as required for Superplastic Forming (SPF), for example.
O3	Homogenised.
T1	Quenched from the hot forming temperature and naturally aged.
T2	Quenched from the hot forming temperature, cold formed and naturally aged.
T3	Solution annealed, cold formed and naturally aged.
T31	Solution annealed, about 1% cold formed and naturally aged.

T351	Solution annealed, stress relief by controlled stretching (str 3% for rolled or cold reshaped bars, 1% to 5% for forgings readjusted after stretching.
T3510	Solution annealed, stress relief by controlled stretching (str to 3 % for drawn tubes) and naturally aged. The products
T3511	As T3510, but slight subsequent readjustment to comply w
T352	Solution annealed, stress relief by 1% to 5% permanent up
T354	Solution annealed, stress relief by cold readjustment in the
T36	Solution annealed, about 6% cold formed and naturally age
T37	Solution annealed, about 7% cold formed and naturally age
T39	Solution annealed and a certain degree of cold forming to a done before or after the natural ageing treatment.
T4	Solution annealed and naturally aged.
T42	Solution annealed and naturally aged. Applies to test mater products that are heat-treated from any state by the consu
T451	Solution annealed, stress relief by controlled stretching (str 3% for rolled or cold reshaped bars, 1% to 5% for forgings readjusted after stretching.
T4510	Solution annealed, stress relief by controlled stretching (str 0.5% to 3 % for drawn tubes) and naturally aged. The prod
T4511	As T4510, but slight subsequent readjustment to comply w
T452	Solution annealed, stress relief by 1% to 5% permanent up
T454	Solution annealed, stress relief by cold readjustment in the
T5	Quenched from the hot forming temperature and artificially
T51	Quenched from the hot forming temperature and not fully arti
T56	Quenched from the hot forming temperature and artificially a (alloy of 6000 series).
<i>T</i> 6	Solution annealed and artificially aged.
T61	Solution annealed and not fully artificially aged to improve r
T6151	Solution annealed, stress relief by controlled stretching (stretc fully artificially aged to improve malleability. The products are r
T62	Solution annealed and artificially aged. Applies to test materia that are heat-treated from any state by the consumer.
T64	Solution annealed and then not fully artificially aged to impr
T651	Solution annealed, stress relief by controlled stretching (str 3% for rolled or cold reshaped bars, 1% to 5% for forgings readjusted after stretching.
T6510	Solution annealed, stress relief by controlled stretching (str to 3 % for drawn tubes) and artificially aged. The products
T6511	As T6510, but slight subsequent readjustment to comply w
T652	Solution annealed, stress relief by 1% to 5% permanent up
T654	Solution annealed, stress relief by cold readjustment in the

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tretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to is or forged and rolled rings) and naturally aged. The products are not

retching degree 1% to 3 % for extruded bars, profiles and tubes, 0.5% s are not readjusted after stretching.

with the specified limits of size allowed.

psetting and naturally aged.

e finisher and naturally aged.

ged.

ged.

achieve the specified mechanical properties. Cold forming can be

erials that are heat-treated from the soft annealed or F state or for sumer.

tretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to is or forged and rolled rings) and naturally aged. The products are not

tretching degree: 1% to 3 % for extruded bars, profiles and tubes, oducts are not readjusted after stretching.

with the specified limits of size allowed.

psetting and naturally aged.

e finisher and naturally aged.

ly aged.

tificially aged to improve malleability.

aged - better mechanical properties than T5 by special process control

malleability.

tching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates) and then not end readjusted after stretching.

ials that are heat-treated from the soft annealed or F state or for products

prove malleability (between T6 and T61).

tretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to s or forged and rolled rings) and artificially aged. The products are not

tretching degree 1% to 3 % for extruded bars, profiles and tubes, 0.5% s are not readjusted after stretching.

with the specified limits of size allowed .

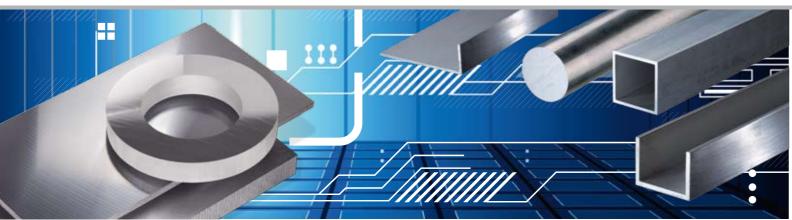
psetting and artificially aged.

e finisher and artificially aged.

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## **Delivery conditions**



<i>T</i> 66	Solution annealed and artificially aged - better mechanical properties than T6 by special control of the process (alloy of 6000 series).
T7	Solution annealed and overcured (artificially aged).
T73	Solution annealed and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking.
T732	Solution annealed and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking. Applies to test materials that are heat-treated from the soft annealed or F state or for products that are heat-treated from any state by the consumer.
T7351	Solution annealed, stress relief by controlled stretching (stretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to 3% for rolled or cold reshaped bars, 1% to 5% for forgings or forged and rolled rings) and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking. The products are not readjusted after stretching.
T73510	Solution annealed by stress relief by controlled stretching (stretching degree: 1% to 3% for extruded rods, profiles and pipes, 0.5% to 3% for drawn tubes) and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking. The products are not readjusted after stretching.
T73511	As T73510, but slight subsequent readjustment to comply with the specified limits of size allowed.
T7352	Solution annealed, stress relief by 1% to 5% permanent upsetting and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking.
T7354	Solution annealed, stress relief by cold readjustment in the finisher and overcured (artificially aged) to achieve an optimum resistance to stress corrosion cracking.
T74	Solution annealed and overcured (artificially aged) (between T73 and T76).
T7451	Solution annealed, stress relief by controlled stretching (stretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to 3% for rolled or cold reshaped bars, 1% to 5% for forgings or forged and rolled rings) and overcured (artificially aged) (between T73 and T76). The products are not readjusted after stretching.
T74510	Solution annealed, stress relief by controlled stretching (stretching degree; 1% to 3 % for extruded bars, profiles and tubes, 0.5% to 3 % for drawn tubes) and overcured (artificially aged) (between T73 and T76). The products are not readjusted after stretching.
T74511	As T74510, but slight subsequent readjustment to comply with the specified limits of size allowed.
T7452	Solution annealed, stress relief by 1% to 5% permanent upsetting and overcured (artificially aged) (between T73 and T76).
T7454	Solution annealed, stress relief by cold readjustment in finisher and overcured (artificially aged) (between T73 and T76).
T76	Solution annealed and overcured (artificially aged) to achieve a good resistance to exfoliation corrosion.
T761	Solution annealed and overcured (artificially aged) to achieve a good resistance to exfoliation corrosion (applies to sheets and
	strips made of material 7475).
T762	strips made of material 7475). Solution annealed and overcured (artificially aged) to achieve a good resistance to exfoliation corrosion. Applies to test materials that are heat-treated from the soft annealed or F state or for products that are heat-treated from any state by the consumer.

#### WORLD OF METALS

	T76510	for drawn tubes) and overcured (artificially aged) to achieve a after stretching.
	T76511	As T76510, but slight subsequent readjustment to comply
	T7652	Solution annealed, stress relief by 1% to 5% permanent up to exfoliation corrosion.
	T7654	Solution annealed, stress relief by cold readjustment in the to exfoliation corrosion.
	T79	Solution annealed and (very limitedly) overcured (artificially
	T79510	Solution annealed, stress relief by controlled stretching (stretch for drawn tubes) and (very limitedly) overcured (artificially a
	T79511	As T79510, but slight subsequent readjustment to comply
	T8	Solution annealed, cold formed and artificially aged.
	T81	Solution annealed, about 1% cold formed and artificially ag
	T82	Solution annealed by the consumer stretched in a controlle
	T832	Solution annealed stretched in a controlled manner to a certain
	T841	Solution annealed, cold formed and not fully artificially age
	T84151	Solution annealed, stress relief by controlled stretching with (plates made of alloys 2091 and 8090).
	T851	Solution annealed, stress relief by controlled stretching (str 3% for rolled or cold reshaped bars, 1% to 5% for forgings readjusted after stretching.
	T8510	Solution annealed, stress relief by controlled stretching (stretch for drawn tubes) and artificially aged. The products are not read
	T8511	As T8510, but slight subsequent readjustment to comply w
	T852	Solution annealed, stress relief by 1% to 5% permanent up
	T854	Solution annealed, stress relief by cold readjustment in the
	T86	Solution annealed, about 6% cold formed and artificially ag
	T87	Solution annealed, about 7% cold formed and artificially ag
	T89	Solution annealed and cold formed to a certain degree to a
	T9	Solution annealed, cold formed and artificially aged.
	W	Solution annealed (unstable state). The time span of natur
	W51	Solution annealed (unstable state), stress relief by controlle for plates, 1% to 3% for rolled or cold reshaped bars, 1% t readjusted after stretching.
	W510	Solution annealed (unstable state) and stress relief by cont profiles and tubes, 0.5% to 3 % for drawn tubes). The proc
ĺ	W511	As W510, but slight subsequent readjustment to comply w
ĺ	W52	Solution annealed (unstable state) and stress relief by 1% t
ĺ	W54	Solution annealed (unstable state) and stress relief by cold

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Solution annealed, stress relief by controlled stretching (stretching degree: 1% to 3% for extruded rods, profiles and pipes, 0.5% to 3% for drawn tubes) and overcured (artificially aged) to achieve a good resistance to exfoliation corrosion. The products are not readjusted

with the specified limits of size allowed.

psetting and overcured (artificially aged) to achieve a good resistance

he finisher and overcured (artificially aged) to achieve a good resistance

v aged).

hing degree 1% to 3 % for extruded bars, profiles and tubes, 0.5% to 3 % aged). The products are not readjusted after stretching.

y with the specified limits of size allowed.

#### ged.

lled manner by at least 2% and artificially aged (alloy 8090).

in degree and artificially aged (applies to drawn tubes made of material 6063) ed (applies to sheets and strips made of alloys 2091 and 8090).

ith a stretching degree of 1.5% to 3% and not fully artificially aged

stretching degree: 0.5% to 3% for sheets, 1.5% to 3% for plates, 1% to gs or forged and rolled rings) and artificially aged. The products are not

hing degree 1% to 3 % for extruded bars, profiles and tubes, 0.5% to 3 % adjusted after stretching.

with the specified limits of size allowed.

psetting and artificially aged.

he finisher and artificially aged.

ged.

ged.

achieve the specified mechanical properties and artificially aged.

ral ageing can also be specified (W2H. . . ).

bled stretching (stretching degree: 0.5% to 3% for sheets, 1.5% to 3% for 5% for forgings or forged and rolled rings). The products are not

ntrolled stretching (stretching degree 1% to 3% for extruded bars, boducts are not readjusted after stretching.

with the specified limits of size allowed.

to 5% permanent upsetting.

Id readjustment in the finisher (forgings).





## **BIKAR METALLE** A COMPANY THAT CAN SIMPLY DO MORE!

Modern technologies make us powerful, flexible and allow us to provide the best quality!

#### Computer-controlled high bay warehouse for

- Standard plates: Capacity 1,000 containers at 5,000 kg
- Super formats and plain milled plates: Capacity 800 containers at 3,500 kg

#### Band saws

- Horizontal up to sizes of 6,020 x 3,020 x 1,150 mm
- Vertical up to sizes of 4,020 x 2,300 x 1,150 mm

#### Buzz saws

• Up to sizes of 6,050 x 6,050 x 170 mm

#### Blank saws and ring saws

• Up to a diameter of 2,500 mm

#### **Deep hole drilling**

- Up to 1,100 mm depth
- Thread up to dia 70 mm

#### Milling

- Precision surface cutter (portal milling machine) cutter head dia 2.700 mm
- Up to 6000 x 2,500 x 5-150 mm
- Surface cutter for individual depth up to 1,000 x 800 x 300 mm

#### Chamfering

• 45° up to about 4 mm chamfer

#### **Usual sawing tolerances**

- Band saws (sawing tolerance: +2 to 3/-0 mm)
- Circular blanks according to drawing (sawing tolerance: +8 to 10/-0 mm) depending on the type of pre-cut part
- of 170 mm

Other tolerances by arrangement



• Precision circular saws (sawing tolerance according to thickness: +-0.2 to +-0.5 mm) up to max. cutting height

# **OUR DELIVERY PROGRAM DIVERSITY FROM A SINGLE SOURCE**

BIKAR has learned over many decades to adapt to the needs of its customers. And that's reflected in the diversity of our stocked and available products. You can only win with a strong partner.

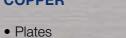


#### ALUMINIUM

- Plates
- Sheets
- Bars
- Circular blanks
- Rings
- Profiles
- Cuttings
- Parts from drawings



### COPPER



- Sheets
- Bars
- Circular blanks
- Rings
- Profiles
- Cuttings
- Parts from drawings



### BRASS

- Plates
- Sheets
- Bars
- Circular blanks
- Rings
- Profiles
- Cuttings
- Parts from drawings



### BRONZE

- Bars
- Tubes
- Bushings
- Rings
- Circular blanks
- Cuttings
- Parts from drawings



- Bars
- Tubes
- Bushings
- Cuttings

WORLD OF METALS



